

Iuliana P Radu

List of Publications by Year in descending order

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200
papers

7,238
citations

57631

44
h-index

64668

79
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201
all docs

201
docs citations

201
times ranked

8695
citing authors

#	ARTICLE	IF	CITATIONS
1	Transient ferromagnetic-like state mediating ultrafast reversal of antiferromagnetically coupled spins. <i>Nature</i> , 2011, 472, 205-208.	13.7	828
2	Efficient metallic spintronic emitters of ultrabroadband terahertz radiation. <i>Nature Photonics</i> , 2016, 10, 483-488.	15.6	605
3	Terahertz spin current pulses controlled by magnetic heterostructures. <i>Nature Nanotechnology</i> , 2013, 8, 256-260.	15.6	476
4	Quasi-Particle Properties from Tunneling in the $\nu = 5/2$ Fractional Quantum Hall State. <i>Science</i> , 2008, 320, 899-902.	6.0	287
5	Nanoscale spin reversal by non-local angular momentum transfer following ultrafast laser excitation in ferrimagnetic GdFeCo. <i>Nature Materials</i> , 2013, 12, 293-298.	13.3	267
6	Electrical Control of Spin Relaxation in a Quantum Dot. <i>Physical Review Letters</i> , 2008, 100, 046803.	2.9	210
7	High-quality, large-area MoSe ₂ and MoSe ₂ /Bi ₂ Se ₃ heterostructures on AlN(0001)/Si(111) substrates by molecular beam epitaxy. <i>Nanoscale</i> , 2015, 7, 7896-7905.	2.8	122
8	High-Field High-Repetition-Rate Sources for the Coherent THz Control of Matter. <i>Scientific Reports</i> , 2016, 6, 22256.	1.6	121
9	Perpendicular exchange bias in ferrimagnetic spin valves. <i>Nature Communications</i> , 2012, 3, 715.	5.8	112
10	Doping-Free Complementary Logic Gates Enabled by Two-Dimensional Polarity-Controllable Transistors. <i>ACS Nano</i> , 2018, 12, 7039-7047.	7.3	104
11	Coherent Optical Phonons and Parametrically Coupled Magnons Induced by Femtosecond Laser Excitation of the Gd(0001) Surface. <i>Physical Review Letters</i> , 2003, 91, 227403.	2.9	99
12	Laser-Induced Magnetization Dynamics of Lanthanide-Doped Permalloy Thin Films. <i>Physical Review Letters</i> , 2009, 102, 117201.	2.9	93
13	Femtosecond Electron and Spin Dynamics in Gd(0001) Studied by Time-Resolved Photoemission and Magneto-optics. <i>Physical Review Letters</i> , 2005, 95, 137402.	2.9	88
14	Understanding Energy Efficiency Benefits of Carbon Nanotube Field-Effect Transistors for Digital VLSI. <i>IEEE Nanotechnology Magazine</i> , 2018, 17, 1259-1269.	1.1	87
15	Ultrafast and Distinct Spin Dynamics in Magnetic Alloys. <i>Spin</i> , 2015, 05, 1550004.	0.6	81
16	Antiferromagnetic-ferromagnetic phase transition in FeRh probed by x-ray magnetic circular dichroism. <i>Physical Review B</i> , 2008, 77, .	1.1	79
17	Fractional quantum Hall effect in a quantum point contact at filling fraction $5/2$. <i>Nature Physics</i> , 2007, 3, 561-565.	6.5	77
18	Plasma-Enhanced Atomic Layer Deposition of Two-Dimensional WS ₂ from WF ₆ , H ₂ Plasma, and H ₂ S. <i>Chemistry of Materials</i> , 2017, 29, 2927-2938.	3.2	74

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19	Low temperature deposition of 2D WS ₂ layers from WF ₆ and H ₂ S precursors: impact of reducing agents. <i>Chemical Communications</i> , 2015, 51, 15692-15695.	2.2	71
20	Metal-Insulator Transition in ALD VO ₂ Ultrathin Films and Nanoparticles: Morphological Control. <i>Advanced Functional Materials</i> , 2015, 25, 679-686.	7.8	70
21	Terahertz Spin Currents and Inverse Spin Hall Effect in Thin-Film Heterostructures Containing Complex Magnetic Compounds. <i>Spin</i> , 2017, 07, 1740010.	0.6	65
22	All electrical propagating spin wave spectroscopy with broadband wavevector capability. <i>Applied Physics Letters</i> , 2016, 109, .	1.5	64
23	Probing ultrafast spin dynamics with high-harmonic magnetic circular dichroism spectroscopy. <i>Physical Review B</i> , 2015, 92, .	1.1	63
24	Polarity control in WSe ₂ double-gate transistors. <i>Scientific Reports</i> , 2016, 6, 29448.	1.6	63
25	Laser-induced generation and quenching of magnetization on FeRh studied with time-resolved x-ray magnetic circular dichroism. <i>Physical Review B</i> , 2010, 81, .	1.1	61
26	Controlled Sulfurization Process for the Synthesis of Large Area MoS ₂ Films and MoS ₂ /WS ₂ Heterostructures. <i>Advanced Materials Interfaces</i> , 2016, 3, 1500635.	1.9	61
27	Magnetic-Field Asymmetry of Nonlinear Transport in Carbon Nanotubes. <i>Physical Review Letters</i> , 2005, 95, 256601.	2.9	60
28	High Cycling Stability and Extreme Rate Performance in Nanoscaled LiMn ₂ O ₄ Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 22413-22420.	4.0	59
29	Energy-Dependent Tunneling in a Quantum Dot. <i>Physical Review Letters</i> , 2007, 98, 036802.	2.9	58
30	Multilayer MoS ₂ growth by metal and metal oxide sulfurization. <i>Journal of Materials Chemistry C</i> , 2016, 4, 1295-1304.	2.7	57
31	Two-Dimensional Crystal Grain Size Tuning in WS ₂ Atomic Layer Deposition: An Insight in the Nucleation Mechanism. <i>Chemistry of Materials</i> , 2018, 30, 7648-7663.	3.2	57
32	Electrically Driven Unidirectional Optical Nanoantennas. <i>Nano Letters</i> , 2017, 17, 7433-7439.	4.5	56
33	Formation mechanism of 2D SnS ₂ and SnS by chemical vapor deposition using SnCl ₄ and H ₂ S. <i>Journal of Materials Chemistry C</i> , 2018, 6, 6172-6178.	2.7	56
34	In situ X-ray diffraction study of the controlled oxidation and reduction in the Vâ€‘O system for the synthesis of VO ₂ and V ₂ O ₃ thin films. <i>Journal of Materials Chemistry C</i> , 2015, 3, 11357-11365.	2.7	55
35	The 2021 ultrafast spectroscopic probes of condensed matter roadmap. <i>Journal of Physics Condensed Matter</i> , 2021, 33, 353001.	0.7	55
36	From the metal to the channel: a study of carrier injection through the metal/2D MoS ₂ interface. <i>Nanoscale</i> , 2017, 9, 10869-10879.	2.8	54

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37	Switching mechanism in two-terminal vanadium dioxide devices. Nanotechnology, 2015, 26, 165202.	1.3	51
38	MoS ₂ /MoTe ₂ Heterostructure Tunnel FETs Using Gated Schottky Contacts. Advanced Functional Materials, 2020, 30, 1905970.	7.8	50
39	Reconfigurable submicrometer spin-wave majority gate with electrical transducers. Science Advances, 2020, 6, .	4.7	50
40	Future Logic Scaling: Towards Atomic Channels and Deconstructed Chips. , 2020, , .		49
41	Process Study and Characterization of VO ₂ Thin Films Synthesized by ALD Using TEMAV and O ₃ Precursors. ECS Journal of Solid State Science and Technology, 2012, 1, P169-P174.	0.9	48
42	Synthesis of large area carbon nanosheets for energy storage applications. Carbon, 2013, 58, 59-65.	5.4	48
43	Layer-controlled epitaxy of 2D semiconductors: bridging nanoscale phenomena to wafer-scale uniformity. Nanotechnology, 2018, 29, 425602.	1.3	48
44	The VO ₂ interface, the metal-insulator transition tunnel junction, and the metal-insulator transition switch On-Off resistance. Journal of Applied Physics, 2012, 112, .	1.1	47
45	Ultra-scaled MOCVD MoS ₂ MOSFETs with 42nm contact pitch and 250ÅμA/Åμm drain current. , 2019, , .		46
46	Nanoscale domain wall devices with magnetic tunnel junction read and write. Nature Electronics, 2021, 4, 392-398.	13.1	46
47	Molecular doping of MoS ₂ transistors by self-assembled oleylamine networks. Applied Physics Letters, 2016, 109, .	1.5	41
48	Nucleation and growth mechanisms of Al ₂ O ₃ atomic layer deposition on synthetic polycrystalline MoS ₂ . Journal of Chemical Physics, 2017, 146, 052810.	1.2	41
49	Highly efficient and stable MoS ₂ FETs with reversible n-doping using a dehydrated poly(vinyl-alcohol) coating. Nanoscale, 2017, 9, 258-265.	2.8	40
50	Complementary Role of Field and Temperature in Triggering ON/OFF Switching Mechanisms in $\{m \text{ Hf}\}/\{m \text{ HfO}}_2\}$ Resistive RAM Cells. IEEE Transactions on Electron Devices, 2013, 60, 2471-2478.	1.6	39
51	Ultrathin Metal/Amorphous-Silicon/Metal Diode for Bipolar RRAM Selector Applications. IEEE Electron Device Letters, 2014, 35, 199-201.	2.2	39
52	Two-stage Kondo effect in a four-electron artificial atom. Physical Review B, 2005, 72, .	1.1	38
53	Transition metal contacts to graphene. Applied Physics Letters, 2015, 107, .	1.5	34
54	Design and benchmarking of hybrid CMOS-Spin Wave Device Circuits compared to 10nm CMOS. , 2015, , .		34

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55	Improving MOCVD MoS ₂ Electrical Performance: Impact of Minimized Water and Air Exposure Conditions. IEEE Electron Device Letters, 2017, 38, 1606-1609.	2.2	33
56	Tunneling Transistors Based on MoS ₂ /MoTe ₂ Van der Waals Heterostructures. IEEE Journal of the Electron Devices Society, 2018, 6, 1048-1055.	1.2	33
57	Impact of device scaling on the electrical properties of MoS ₂ field-effect transistors. Scientific Reports, 2021, 11, 6610.	1.6	33
58	Spin-dependent tunneling of single electrons into an empty quantum dot. Physical Review B, 2008, 78, .	1.1	32
59	Low leakage Ru-strontium titanate-Ru metal-insulator-metal capacitors for sub-20nm technology node in dynamic random access memory. Applied Physics Letters, 2014, 104, .	1.5	32
60	Band alignment at interfaces of few-monolayer MoS ₂ with SiO ₂ and HfO ₂ . Microelectronic Engineering, 2015, 147, 294-297.	1.1	31
61	Non-volatile spin wave majority gate at the nanoscale. AIP Advances, 2017, 7, .	0.6	31
62	Reliability and Variability of Advanced CMOS Devices at Cryogenic Temperatures. , 2020, , .		31
63	Crystallization and semiconductor-metal switching behavior of thin VO ₂ layers grown by atomic layer deposition. Thin Solid Films, 2014, 550, 59-64.	0.8	30
64	Selective THz control of magnetic order: new opportunities from superradiant undulator sources. Journal Physics D: Applied Physics, 2018, 51, 114007.	1.3	30
65	Nucleation mechanism during WS ₂ plasma enhanced atomic layer deposition on amorphous Al ₂ O ₃ and sapphire substrates. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, .	0.9	30
66	Benchmarking of MoS ₂ FETs With Multigate Si-FET Options for 5 nm and Beyond. IEEE Transactions on Electron Devices, 2015, 62, 4051-4056.	1.6	29
67	Insight on the Characterization of MoS ₂ -Based Devices and Requirements for Logic Device Integration. ECS Journal of Solid State Science and Technology, 2016, 5, Q3072-Q3081.	0.9	28
68	MoS ₂ Functionalization with a Sub-nm Thin SiO ₂ Layer for Atomic Layer Deposition of High- ϵ_r Dielectrics. Chemistry of Materials, 2017, 29, 6772-6780.	3.2	27
69	Micromagnetic simulations of magnetoelastic spin wave excitation in scaled magnetic waveguides. Applied Physics Letters, 2017, 111, .	1.5	27
70	ALICE"An advanced reflectometer for static and dynamic experiments in magnetism at synchrotron radiation facilities. Review of Scientific Instruments, 2015, 86, 063902.	0.6	26
71	MoS ₂ synthesis by gas source MBE for transition metal dichalcogenides integration on large scale substrates. Journal of Applied Physics, 2018, 123, .	1.1	26
72	Engineering Wafer-Scale Epitaxial Two-Dimensional Materials through Sapphire Template Screening for Advanced High-Performance Nanoelectronics. ACS Nano, 2021, 15, 9482-9494.	7.3	26

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73	WS₂ transistors on 300 mm wafers with BEOL compatibility. , 2017, , .		24
74	Nucleation and growth mechanism of 2D SnS ₂ by chemical vapor deposition: initial 3D growth followed by 2D lateral growth. 2D Materials, 2018, 5, 035006.	2.0	23
75	Spin-Wave Emission by Spin-Orbit-Torque Antennas. Physical Review Applied, 2018, 10, .	1.5	21
76	Toward an Understanding of the Electric Field-Induced Electrostatic Doping in van der Waals Heterostructures: A First-Principles Study. ACS Applied Materials & Interfaces, 2017, 9, 7725-7734.	4.0	20
77	Spintronic majority gates. , 2015, , .		19
78	Proposal for nanoscale cascaded plasmonic majority gates for non-Boolean computation. Scientific Reports, 2017, 7, 17866.	1.6	19
79	Analysis of admittance measurements of MOS capacitors on CVD grown bilayer MoS ₂ . 2D Materials, 2019, 6, 035035.	2.0	19
80	Back hopping in spin transfer torque switching of perpendicularly magnetized tunnel junctions. Physical Review B, 2020, 102, .	1.1	19
81	Two-dimensional WS ₂ nanoribbon deposition by conversion of pre-patterned amorphous silicon. Nanotechnology, 2017, 28, 04LT01.	1.3	18
82	On the electrostatic control achieved in transistors based on multilayered MoS ₂ : A first-principles study. Journal of Applied Physics, 2017, 121, .	1.1	18
83	Chain of magnetic tunnel junctions as a spintronic memristor. Journal of Applied Physics, 2018, 124, .	1.1	18
84	Comparison of short-channel effects in monolayer MoS ₂ based junctionless and inversion-mode field-effect transistors. Applied Physics Letters, 2016, 108, 023506.	1.5	17
85	Exchange-driven Magnetic Logic. Scientific Reports, 2017, 7, 12154.	1.6	17
86	Magnonic Band Structure in Vertical Meander-Shaped $\text{Co}_{40}\text{Fe}_{40}$	1.5	17
87	(Invited) Vanadium Oxide as a Memory Material. ECS Transactions, 2011, 35, 233-243.	0.3	16
88	(Invited) Vanadium Dioxide for Selector Applications. ECS Transactions, 2013, 58, 249-258.	0.3	16
89	Single- and multilayer graphene wires as alternative interconnects. Microelectronic Engineering, 2016, 156, 131-135.	1.1	16
90	Material-Device-Circuit Co-optimization of 2D Material based FETs for Ultra-Scaled Technology Nodes. Scientific Reports, 2017, 7, 5016.	1.6	16

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91	Magnonic band structure in CoFeB/Ta/NiFe meander-shaped magnetic bilayers. Applied Physics Letters, 2021, 118, .	1.5	16
92	Toward error-free scaled spin torque majority gates. AIP Advances, 2016, 6, .	0.6	15
93	Modulating the resistivity of MoS ₂ through low energy phosphorus plasma implantation. Applied Physics Letters, 2017, 110, .	1.5	15
94	Graphene based Van der Waals contacts on MoS ₂ field effect transistors. 2D Materials, 2021, 8, 015003.	2.0	15
95	A flexible 300 mm integrated Si MOS platform for electron- and hole-spin qubits exploration. , 2020, , .		15
96	Oriented growth of single-wall carbon nanotubes using alumina patterns. Nanotechnology, 2004, 15, 473-476.	1.3	14
97	Instant-On Spin Torque in Noncollinear Magnetic Tunnel Junctions. Physical Review Applied, 2018, 10, .	1.5	14
98	The Role of Nonidealities in the Scaling of MoS ₂ FETs. IEEE Transactions on Electron Devices, 2018, 65, 4635-4640.	1.6	14
99	Understanding ambipolar transport in MoS ₂ field effect transistors: the substrate is the key. Nanotechnology, 2021, 32, 135202.	1.3	14
100	Scaling trends and performance evaluation of 2-dimensional polarity-controllable FETs. Scientific Reports, 2017, 7, 45556.	1.6	13
101	Transport properties of chemically synthesized MoS ₂ – Dielectric effects and defects scattering. Applied Physics Letters, 2016, 109, 233102.	1.5	12
102	Paramagnetic Intrinsic Defects in Polycrystalline Large-Area 2D MoS ₂ Films Grown on SiO ₂ by Mo Sulfurization. Nanoscale Research Letters, 2017, 12, 283.	3.1	12
103	(Invited) Internal Photoemission of Electrons from 2-Dimensional Semiconductors. ECS Transactions, 2017, 80, 191-201.	0.3	12
104	Doping of graphene for the application in nano-interconnect. Microelectronic Engineering, 2017, 167, 42-46.	1.1	12
105	Benchmarking of monolithic 3D integrated MX ₂ /FETs with Si FinFETs. , 2017, , .		12
106	Fabrication of magnetic tunnel junctions connected through a continuous free layer to enable spin logic devices. Japanese Journal of Applied Physics, 2018, 57, 04FN01.	0.8	12
107	3-D Sequential Stacked Planar Devices Featuring Low-Temperature Replacement Metal Gate Junctionless Top Devices With Improved Reliability. IEEE Transactions on Electron Devices, 2018, 65, 5165-5171.	1.6	12
108	Ultrafast dynamics at lanthanide surfaces: microscopic interaction of the charge, lattice and spin subsystems. Journal Physics D: Applied Physics, 2008, 41, 164004.	1.3	11

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109	Structural and magnetic characterization of large area, free-standing thin films of magnetic ion intercalated dichalcogenides $\text{Mn}_{0.25}\text{TaS}_2$ and $\text{Fe}_{0.25}\text{TaS}_2$. Journal of Physics Condensed Matter, 2016, 28, 356002.	0.7	11
110	Chemical vapor deposition of monolayer-thin WS_2 crystals from the WF_6 and H_2S precursors at low deposition temperature. Journal of Chemical Physics, 2019, 150, 104703.	1.2	11
111	Impact of MoS_2 layer transfer on electrostatics of $\text{MoS}_2/\text{SiO}_2$ interface. Nanotechnology, 2019, 30, 055702.	1.3	11
112	A MOS capacitor model for ultra-thin 2D semiconductors: the impact of interface defects and channel resistance. 2D Materials, 2020, 7, 035018.	2.0	11
113	Low dephasing and robust micromagnet designs for silicon spin qubits. Applied Physics Letters, 2021, 119, .	1.5	11
114	Sources of variability in scaled MoS_2 FETs. , 2020, , .		11
115	Bilayer Graphene Tunneling FET for Sub-0.2 V Digital CMOS Logic Applications. IEEE Electron Device Letters, 2014, 35, 1308-1310.	2.2	10
116	Interconnected magnetic tunnel junctions for spin-logic applications. AIP Advances, 2018, 8, .	0.6	10
117	Ferroelectric Control of Magnetism in Ultrathin HfO_2/CoPt Layers. ACS Applied Materials & Interfaces, 2019, 11, 34385-34393.	4.0	10
118	Electronic voltage control of magnetic anisotropy at room temperature in high- $\mu_0 H$ trilayer. Physical Review Materials, 2020, 4, .	0.9	10
119	System-level assessment and area evaluation of Spin Wave logic circuits. , 2014, , .		9
120	Demonstration of $2 \times 10^{12} \text{ cm}^{-2}$ 2D-oxide interface trap density on back-gated MoS_2 flake devices with 2.5 nm EOT. Microelectronic Engineering, 2017, 178, 145-149.	1.1	9
121	Evaluation of multilayer graphene for advanced interconnects. Microelectronic Engineering, 2017, 167, 1-5.	1.1	9
122	Relation between film thickness and surface doping of MoS_2 based field effect transistors. APL Materials, 2018, 6, .	2.2	9
123	The conversion mechanism of amorphous silicon to stoichiometric WS_2 . Journal of Materials Chemistry C, 2018, 6, 4122-4130.	2.7	9
124	Analysis of Transferred MoS_2 Layers Grown by MOCVD: Evidence of Mo Vacancy Related Defect Formation. ECS Journal of Solid State Science and Technology, 2020, 9, 093001.	0.9	9
125	3D Sequential Low Temperature Top Tier Devices using Dopant Activation with Excimer Laser Anneal and Strained Silicon as Performance Boosters. , 2020, , .		9
126	Characterization of thin films of the solid electrolyte $\text{Li}_x\text{Mg}_{1-2x}\text{Al}_{2+x}\text{O}_4$ ($x = 0, 0.05, 0.15, 0.25$). Physical Chemistry Chemical Physics, 2015, 17, 29045-29056.	1.3	8

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127	Perpendicular magnetic anisotropy of CoPt bilayers on ALD HfO ₂ . Journal of Applied Physics, 2016, 120, .	1.1	8
128	Effect of material parameters on two-dimensional materials based TFETs: An energy-delay perspective. , 2016, , .		8
129	Operating conditions and stability of spin torque majority gates: Analytical understanding and numerical evidence. Journal of Applied Physics, 2017, 121, .	1.1	8
130	Perpendicular magnetic anisotropy of CoFeBTa bilayers on ALD HfO ₂ . AIP Advances, 2017, 7, 055933.	0.6	8
131	Material-Device-Circuit Co-Design of 2-D Materials-Based Lateral Tunnel FETs. IEEE Journal of the Electron Devices Society, 2018, 6, 979-986.	1.2	8
132	Microwave Characterization of Ba-Substituted PZT and ZnO Thin Films. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 881-888.	1.7	8
133	First experimental demonstration of a scalable linear majority gate based on spin waves. , 2018, , .		8
134	The Growing Application Field of Laser Debonding: From Advanced Packaging to Future Nanoelectronics. , 2019, , .		8
135	Electrical spin-wave spectroscopy in nanoscale waveguides with nonuniform magnetization. Applied Physics Letters, 2021, 118, .	1.5	8
136	VO ₂ , a Metal-Insulator Transition Material for Nanoelectronic Applications. ECS Transactions, 2012, 45, 151-158.	0.3	7
137	Wide operating window spin-torque majority gate towards large-scale integration of logic circuits. AIP Advances, 2018, 8, 055920.	0.6	7
138	Scaled spintronic logic device based on domain wall motion in magnetically interconnected tunnel junctions. , 2018, , .		7
139	Thermal recrystallization of short-range ordered WS ₂ films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, .	0.9	7
140	Evaluation of the effective work-function of monolayer graphene on silicon dioxide by internal photoemission spectroscopy. Thin Solid Films, 2019, 674, 39-43.	0.8	7
141	An Integrated Silicon MOS Single-Electron Transistor Charge Sensor for Spin-Based Quantum Information Processing. IEEE Electron Device Letters, 2020, 41, 1253-1256.	2.2	7
142	Fabrication and room temperature characterization of trilayer junctions for the development of superconducting qubits on 300 mm wafers. Japanese Journal of Applied Physics, 2021, 60, SBBI04.	0.8	7
143	Graphene wires as alternative interconnects. , 2015, , .		6
144	(Invited) Heterogeneous Nano- to Wide-Scale Co-Integration of Beyond-Si and Si CMOS Devices to Enhance Future Electronics. ECS Transactions, 2015, 66, 3-14.	0.3	6

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145	Dynamical influence of vortex-antivortex pairs in magnetic vortex oscillators. Journal of Magnetism and Magnetic Materials, 2015, 394, 292-298.	1.0	6
146	A route towards the fabrication of 2D heterostructures using atomic layer etching combined with selective conversion. 2D Materials, 2019, 6, 035030.	2.0	6
147	All-Electrical Control of Scaled Spin Logic Devices Based on Domain Wall Motion. IEEE Transactions on Electron Devices, 2021, 68, 2116-2122.	1.6	6
148	Two-dimensional WS ₂ crystals at predetermined locations by anisotropic growth during atomic layer deposition. Journal of Applied Physics, 2020, 128, .	1.1	6
149	Efficient Modeling of Charge Trapping at Cryogenic Temperatures-Part I: Theory. IEEE Transactions on Electron Devices, 2021, 68, 6365-6371.	1.6	6
150	Toward the manipulation of a single spin in an AlGaAs/GaAs single-electron transistor. , 2006, , .		5
151	Large Area Carbon Nanosheet Capacitors. ECS Solid State Letters, 2014, 3, N8-N10.	1.4	5
152	Band alignment and effective work function of atomic-layer deposited VO ₂ and V ₂ O ₅ films on SiO ₂ and Al ₂ O ₃ . Physica Status Solidi C: Current Topics in Solid State Physics, 2015, 12, 238-241.	0.8	5
153	Origin of the performances degradation of two-dimensional-based metal-oxide-semiconductor field effect transistors in the sub-10-nm regime: A first-principles study. Applied Physics Letters, 2016, 108, .	1.5	5
154	Demonstration of Direction Dependent Conduction through MoS ₂ Films Prepared by Tunable Mass Transport Fabrication. ECS Journal of Solid State Science and Technology, 2016, 5, Q3046-Q3049.	0.9	5
155	Spin-torque-driven MTJs with extended free layer for logic applications. Journal Physics D: Applied Physics, 2018, 51, 275002.	1.3	5
156	Measurement of direct and indirect bandgaps in synthetic ultrathin MoS ₂ and WS ₂ films from photoconductivity spectra. Journal of Applied Physics, 2021, 129, .	1.1	5
157	Ab initio study of ultrafast spin dynamics in Gd _x (FeCo) _{1-x} alloys. Applied Physics Letters, 2022, 120, .	1.5	5
158	High mobility SiMOSFETs fabricated in a full 300-nm CMOS process. Materials for Quantum Technology, 2021, 1, 041001.	1.2	5
159	System-level assessment and area evaluation of spin wave logic circuits. , 2014, , .		4
160	Area and routing efficiency of SWD circuits compared to advanced CMOS. , 2015, , .		4
161	Transistors on two-dimensional semiconductors: contact resistance limited by the contact edges. , 2017, , .		4
162	Towards high-performance polarity-controllable FETs with 2D materials. , 2018, , .		4

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163	Quantum Mechanical Charge Trap Modeling to Explain BTI at Cryogenic Temperatures. , 2020, , .		4
164	(Invited) First-Principles Investigation of High-k Dielectrics for Nonvolatile Memories. ECS Transactions, 2010, 33, 393-407.	0.3	3
165	Deducing the apparent flat-band position V_{fb} and the doping level of large area single layer graphene MOS capacitors. Microelectronic Engineering, 2015, 147, 314-317.	1.1	3
166	FETs on 2-D Materials: Deconvolution of the Channel and Contact Characteristics by Four-Terminal Resistance Measurements on WSe ₂ Transistors. IEEE Transactions on Electron Devices, 2017, 64, 2970-2976.	1.6	3
167	Performance Comparison of s-Si, In _{0.53} Ga _{0.47} As, Monolayer BP, and WS ₂ -Based n-MOSFETs for Future Technology Nodes – Part I: Device-Level Comparison. IEEE Transactions on Electron Devices, 2019, 66, 3608-3613.	1.6	3
168	Efficient Modeling of Charge Trapping at Cryogenic Temperatures – Part II: Experimental. IEEE Transactions on Electron Devices, 2021, 68, 6372-6378.	1.6	3
169	Publisher’s Note: Magnetic-Field Asymmetry of Nonlinear Transport in Carbon Nanotubes [Phys. Rev. Lett.95, 256601 (2005)]. Physical Review Letters, 2005, 95, .	2.9	2
170	Spin waves for interconnect applications. , 2017, , .		2
171	Tunneling transistors based on MoS ₂ /MoTe ₂ Van der Waals heterostructures. , 2017, , .		2
172	Device and Circuit Level Gate Configuration Optimization for 2D Material Field-Effect Transistors. , 2019, , .		2
173	TCAD-Assisted MultiPhysics Modeling & Simulation for Accelerating Silicon Quantum Dot Qubit Design. , 2020, , .		2
174	Linking Room- and Low-Temperature Electrical Performance of MOS Gate Stacks for Cryogenic Applications. IEEE Electron Device Letters, 2022, 43, 674-677.	2.2	2
175	CMOS-Compatible Dielectric Constant Engineering by Embedding Metallic Particles in Aluminum Oxide. ECS Solid State Letters, 2012, 2, N1-N3.	1.4	1
176	Coupling of spin and vibrational degrees of freedom of adsorbates at metal surfaces probed by vibrational sum-frequency generation. Applied Physics Letters, 2013, 103, 132403.	1.5	1
177	Effect of material parameters on two-dimensional materials based TFETs: An energy-delay perspective. , 2016, , .		1
178	Overview of spin-based majority gates and interconnect implications. , 2016, , .		1
179	(Invited) Electrical Atomic Force Microscopy for 2D Transition Metal Dichalcogenide Materials. ECS Transactions, 2017, 77, 41-47.	0.3	1
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